

WHAT IS CLAIMED IS:

1. A ball trajectory measuring apparatus comprising:
 - a first camera for photographing a flying ball from a back part;
 - a second camera having an angle of view related to that of the first camera and serving to photograph the ball from the back part later than the first camera;
 - a third camera for photographing the ball from a front part;
 - a control portion for controlling photographing timings of the first, second and third cameras; and
 - a calculating portion for calculating position coordinates of the ball based on image data obtained by the first, second and third cameras, and position coordinates, directions of optical axes and angles of view of the respective cameras.
2. The ball trajectory measuring apparatus according to claim 1, wherein the first camera is positioned behind a ball launch point, the second camera is positioned between the launch point and a drop point, and the third camera is positioned before the drop point.
3. The ball trajectory measuring apparatus according to claim 1, wherein the angle of view of the first camera partially overlaps with that of the second camera, and the angle of view of the second camera is related to that of the first camera based on ball images which are simultaneously photographed by the first camera and the second camera.
4. A ball trajectory measuring apparatus comprising:
 - a first camera for photographing a flying ball from a front part;
 - a second camera having an angle of view related to that of the first camera and serving to photograph the ball from the front part earlier than the first camera;
 - a third camera for photographing the ball from a back part;
 - a control portion for controlling photographing timings of the first, second and third cameras; and
 - a calculating portion for calculating position

coordinates of the ball based on image data obtained by the first, second and third cameras, and position coordinates, directions of optical axes and angles of view of the respective cameras.

5. The ball trajectory measuring apparatus according to claim 4, wherein the first camera is positioned before a ball drop point, the second camera is positioned between a launch point and the drop point, and the third camera is positioned behind the launch point.

6. The ball trajectory measuring apparatus according to claim 4, wherein the angle of view of the first camera partially overlaps with that of the second camera, and the angle of view of the second camera is related to that of the first camera based on ball images which are simultaneously photographed by the first camera and the second camera.